ONTARIO Designs

A division of ONTARIO IMPORT AND EXPORT CC

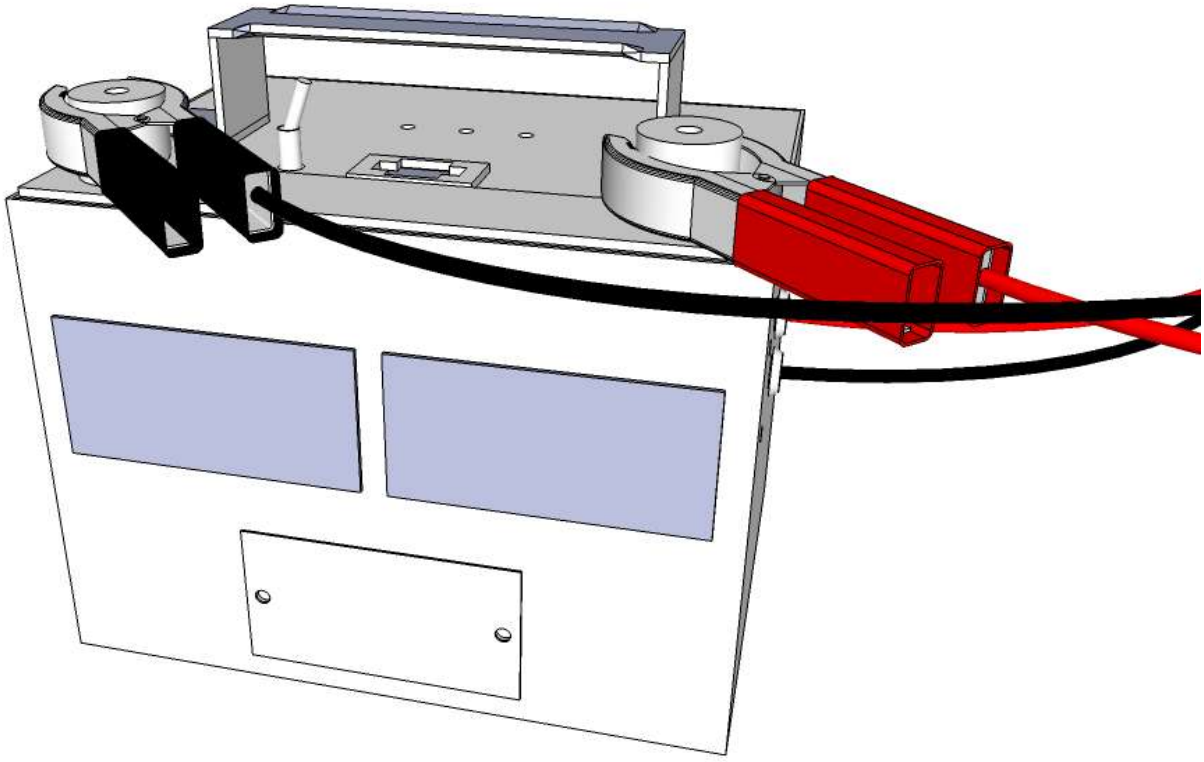
Automotive

POWER BACKUP

and

CHARGE RATE TESTER

ONTCEPS12 Series



USER MANUAL

Website: www.ontarioza.com

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Introduction:

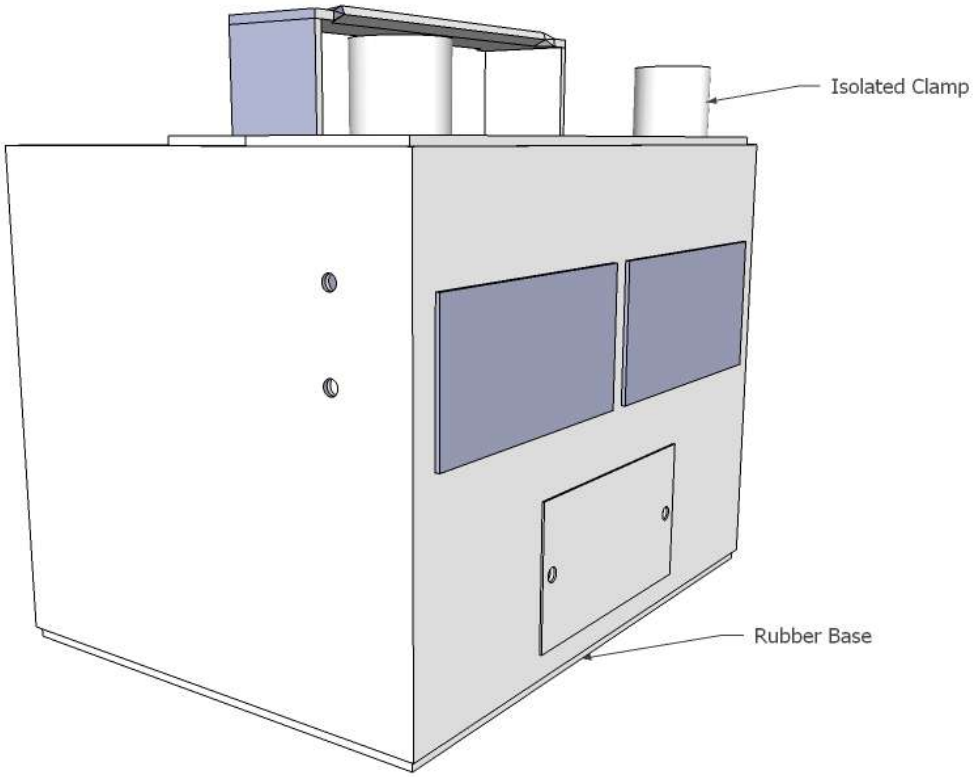
With the advances on the electronic systems for automotive vehicles, it is a precautionary measure to back up vehicle power when performing battery fitments and replacements. Failure to perform this procedure may cause the vehicle to have electronic memory loss including radio setup, window position calibration and alarm program.

The ONTCEPS12 series is used to back up automotive vehicle power when performing battery installations. It also functions as an “alternator charge rate tester”.

Features:

1. **Handy Box Unit with Isolated Clamping Points and Rubber Base**

With the non-slip rubber base the unit can be placed on any surface including the engine bay. Isolated clamping points provides safe storage for clamps.

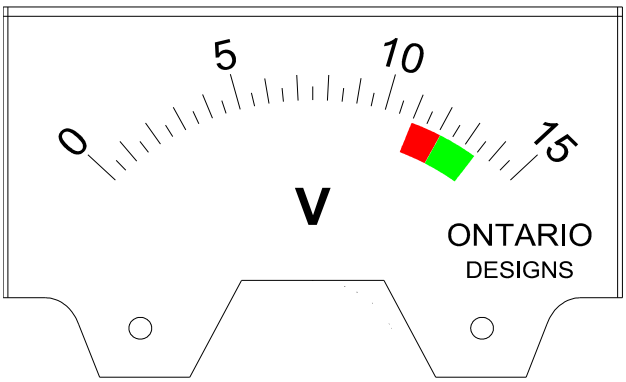


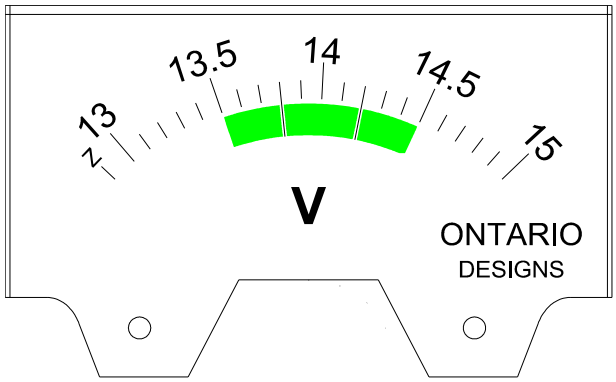
2. Flush Panel Meters

The panel meters fit flush into the unit. This minimizes damage to the meters.

3. Clear Wide View Self-Explanatory Graphs

Two Copyright© protected graphs ensures reliability backups and accurate “alternator charge rate” tests.





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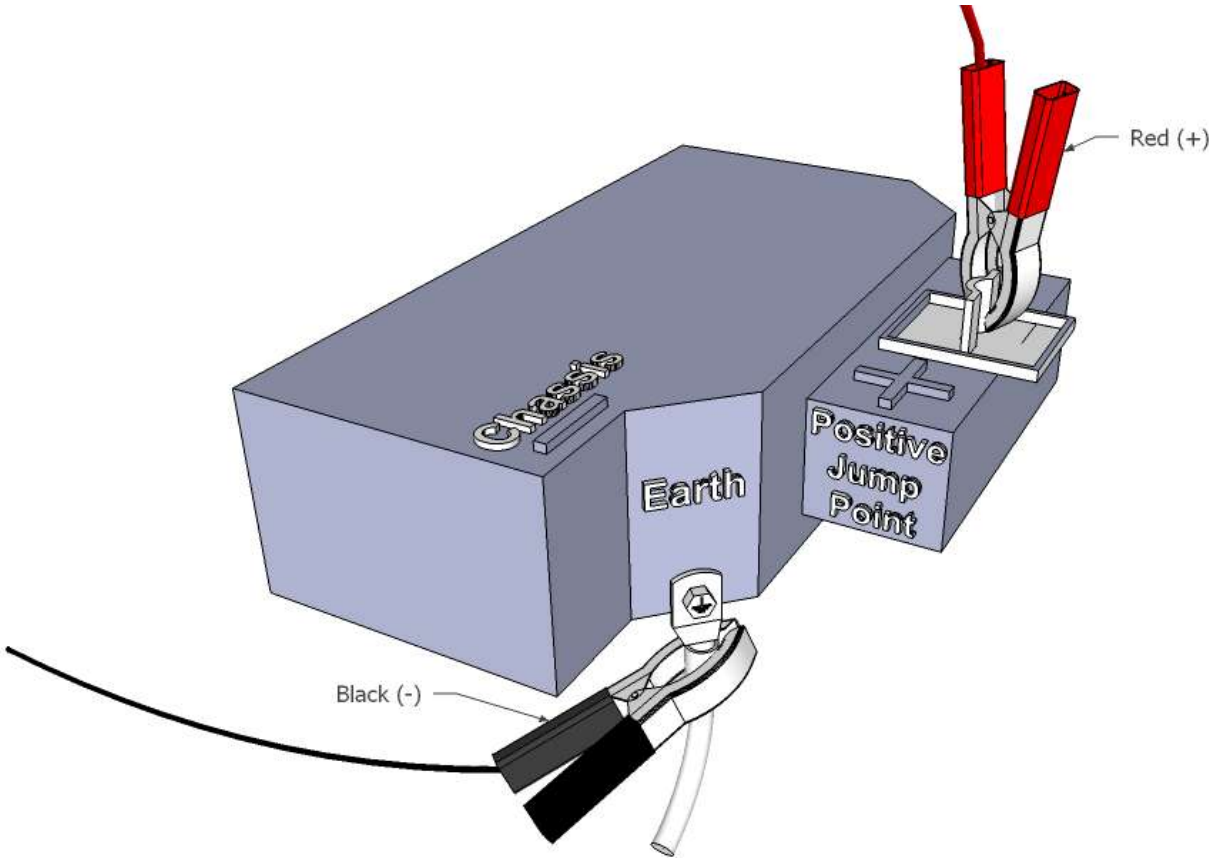
Power Backup Procedures:

1.Clamp Connections:

Note: *Do not use cigarette power points on vehicles as a backup access points. These connections may have protective circuitry that will prevent reversed inputs.*

Clamp Connections on Jump Start Points

Switch the unit power-switch to the "Off" position before connecting. Failure to perform this procedure may cause an electric spark. Clean the jump start points on the vehicle. Place the (red) clamp jaw around positive (+) jump start point. Place the negative (black) clamp jaw around the negative (-) jump start point or the chassis. The standard "Backup" procedure can now be performed as stipulated in point 2 below.



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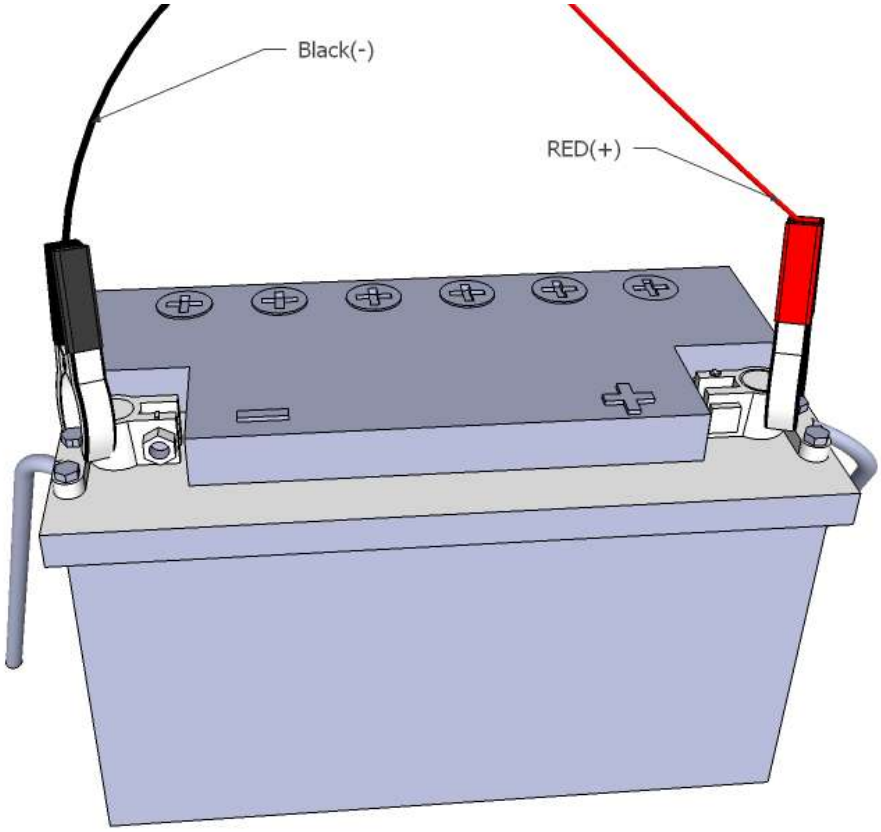
Clamp Connections on Battery Terminals



Switch the unit power-switch to the "Off" position before connecting. Failure to perform this procedure may cause an electric spark. Clean the terminals on the vehicle battery. Place the positive (red) clamp jaw around the back side of the positive (+) terminal allowing access to loosen the terminal nut. Place the negative (black) clamp jaw around the back side of the negative (-) terminal allowing access to loosen the terminal nut . The negative (black) clamp jaw can also be clamped on the chassis. The standard "Backup" procedure can now be performed as stipulated in point 2 below.

2. Backup:

Switch off the vehicle ignition and lights.
With the clamps connected *(refer "Clamp Connections")* the needle on the Voltage panel meter should indicate a positive (+) voltage detected from the battery to be replaced. If not, check the clamp connections. Dirt can be cleared with scratching back-and-forth motions to the clamps. Check the protection fuse on the unit. If blown, replace with 10 – 15 amp blade fuse.

Switch the unit power-switch to the "ON" position!! The unit will now backup the vehicle power. Discontent the automotive battery terminals. *(Note1:The needle on the Voltage panel should stay above 10Volt. If not, the unit was not switched on. Note2: The positive (+) automotive battery terminal must not touch any negative (-) chassis point of the vehicle during this procedure)*

Remove the automotive battery from the vehicle and fit replacement battery. Connect the battery terminals on the replacement battery again. Switch the unit power-switch to the "Off" position as the process is complete. If required, the "Alternator Charge Rate Test Procedure" can be done *(refer "Alternator Charge Rate Test Procedure")*. If not, disconnect the clamps.

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Alternator Charge Rate Test Procedure:

With the clamps connected *(refer "Clamp Connections on Battery Terminals")* and the unit power-switch to the "Off" position, start the vehicle. Increase the revolutions to 2000 r.p.m. The needle on the Alternator panel meter should stay between 13.8 Volt and 14.2 Volt. Repeat test with vehicle main lights switched on.
Note: A bottom buffer on the Alternator graph has been added for alternators with lower performance. A top buffer on the Alternator graph has been added for new calcium-calcium high charging specifications alternators that charge up to 14.5V. Use own discretion.

Trouble shooting:

- **Voltage panel meters do not detect any voltage**

1. Check protection fuse on unit. If blown, replace with 10 – 15 amp blade fuse.
2. Clean the automotive battery terminals and the units clamps. Check the clamp connections. Dirt can also be cleared with scratching back-and-forth motions when the clamps are connected to the battery terminals. If problem persists, send product to nearest sales representative for repairs.

- **Voltage panel meter needle shifts to the incorrect (left negative) side.**

Reverse polarity.

- **Panel meter needles not on zero point**

Send product to nearest sales representative.

Maintenance:

- Keep the 12Volt lead-acid battery located inside the unit charged. The charge state can be checked by switching the unit power-switch to the "ON" position. The Voltage panel meter red bar indicates that charging is required. Connect a 12Volt lead-acid battery chargers clamps directly to the units clamps (+ on +) and (- on -). Switch the unit power-switch to the "ON" position to initiate charging. The Alternator panel meter will indicate the charge voltage.
- Replace the 12Volt lead-acid battery located inside the unit every 2 to 3 years, or when faulty. A nearest sales representative may perform repairs if soldering skills are required.
- The clamps on the unit should be kept clean with a solution of hot water and bicarbonate of soda.
- Do not let the inner components come into contact with water.
- The casing and panel meters may be cleaned with a soft damp cloth.
- Do not drop the unit onto hard services or let it fall. This may cause damage and void the warranty.

Safety Instructions:

- The ONTCEPS12 is designed for 12Volt automotive vehicles. Do dot use the unit for any other purpose.
- Always make sure the units power-switch is in the "Off" position before making connections.
- Do not perform replace a hot automotive battery with a hissing sound from excessive gassing.
- A unit with damaged cables should not be used. Repairs should be performed by a ONTARIO IMPORT AND EXPORT CC representative.
- Always use protective gear including safety glasses when working with lead-acid batteries.
- Batteries emit explosive gas. Never smoke or allow open sparks near the vicinity of the battery.
- Lead-acid battery acid is corrosive. If acid come into contact with eyes, rinse with fresh water and seek immediate medical advice.
- Allow sufficient ventilation when using the unit.
- This product should not be used by children.

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Technical Specifications:

Model	***ONTCEPS12***
Rated Input Voltage	0-15Vdc, 20Vdc max for 20 seconds
Rated Reverse Voltage *(Do not operate in this mode)*	-15Vdc for 5 seconds
Alternator test resolution	0.1V
Internal Battery Type	12Volt 7Amp-Hour valve regulated lead-acid
Internal Battery Rated Charge	14.5Volt max, 2.2Amp max
Dimensions on casing	158mm x 116mm x 148mm (LxWxH)
Indicators (Panel Meters)	Analogue, wide view
Dimension on Panel Meter View Area	69mm x 34mm (LxH)
Clamp Cable length	1 Meters
Clamp Grasp Displacement	24 mm
Protection Fuse	10 – 15Amp blade
Weight *(Including internal Battery)*	3.2 Kg

Limited Warranty:

This product carries a 1 year limited warranty to the original purchaser on manufacturing faults. The 12Volt lead-acid battery located inside the unit carries a 3 month limited warranty. The receipt (proofing date of purchase) and the product must be returned to a ONTARIO IMPORT AND EXPORT CC representative. The warranty is void if the unit casing has been opened by any one else. The warranty is also void when handled carelessly.

ONTARIO IMPORT AND EXPORT CC will not be held responsible for any damages on other products nor personal injury when using our products.

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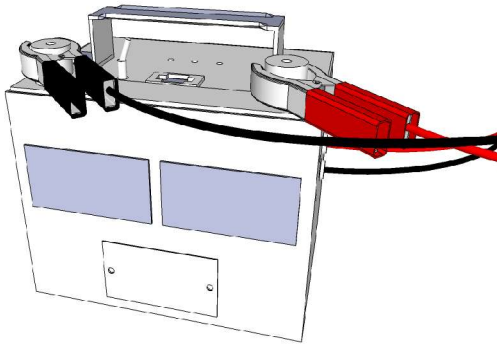
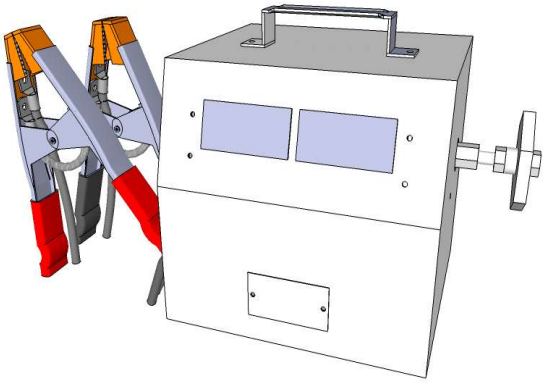
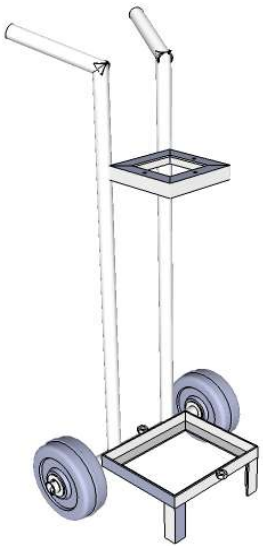
Ordering:

Product	*Illustration*	*Ordering Code*
Automotive power backup unit with build in alternator charge rate testing feature		**ONTCEPS12**
Accessories ***(Not included with ONTCEPS12)***		
Carbon-Graphite 6000Watt 12V Lead-Acid Battery Load-Tester		**ONTLT6000**
Trolley for ONTLT6000 Load-Tester		**ONTTR001**

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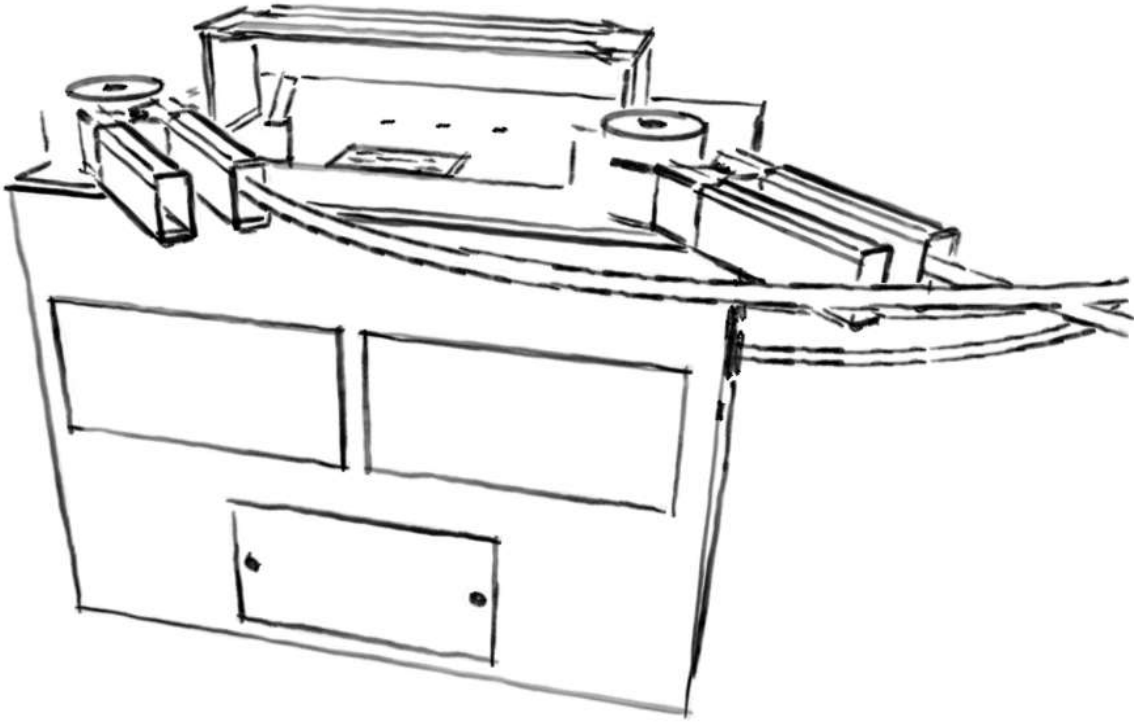
Manufacturer Declaration:

Designer: ONTARIO Designs a division of ONTARIO IMPORT AND EXPORT CC
Manufacturer: ONTARIO IMPORT AND EXPORT CC (South Africa)

This product has been designed by a team with years experience in the lead-acid battery retail and wholesale industry including electronic engineering. The product is engineered to be robust and accurate for professional customer service. The manufacturer tests, calibrates and approves all products to high standards.



Support and Contact Information:

ONTARIO IMPORT AND EXPORT CC offers professional customer support:
www.ontarioza.com

Director: Petrus Jacobus Nel
Electronic Engineer (B.Eng)
ONTARIO IMPORT AND EXPORT CC

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